

Appl. No. : 10/824,797
Filed : April 15, 2004

REMARKS

Claim 9 is amended to clarify the recited optical film. Support the amendment can be found in the specification, for example, at page 18, lines 15, through page 19, line 15. No new matter is added by this amendment.

New Claims 30 and 31 are submitted herewith. Support for new Claim 30 is found in the specification, for example, at page 12, lines 14-25, and page 14, line 5, though page 15, line 1. Support for new Claim 31 is found in the specification, for example, at page 18, lines 15-20. No new matter is added by these new claims.

Applicant respectfully requests entry of the amendments and reconsideration of the application in view of the amendments and the following remarks. Upon entry of the amendments, Claims 9 and 18-31 will be pending.

Rejection of Claim 9 under 35 U.S.C. §112, Second Paragraph

Claim 9 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite. The Office Action states that the phrase "improving display-quality" is indefinite. Claim 9 is amended herein to no longer recite the phrase "improving display-quality," and to instead recite that the optical film is "a liquid crystal display optical film." Applicants' specification teaches that the use of the claimed methods affords particular advantages in preparation of liquid crystal displays, and that various optical films incorporated in liquid crystal displays improve the display quality (see, e.g., page 1, line 18, through page 2, line 3, and page 3, lines 18-22). Accordingly, Applicants' amendment emphasizes that the recited optical film is a film that is used in liquid crystal displays, and is not an optical film used merely as, e.g., a protective release film, as was described in previously cited references in prior Office Actions.

Rejection of Claims 9 and 18-29 Under 35 U.S.C. §103

Claims 9 and 18-29 have been rejected under 35 U.S.C. §103 as being obvious over US Pat. No. 6,914,139 (Mukunoki) in view of US Pat. No. 5,391,472 (Muys) and US Pat. No. 5,880,800 (Mikura).

Applicant respectively traverses this rejection.

Appl. No. : 10/824,797
Filed : April 15, 2004

Claim 9

Claim 9, as amended, is directed to a method for manufacturing an antistatic optical film comprising an antistatic layer at least one side of a liquid crystal display optical film, comprising the steps of: applying an aqueous solution or an aqueous dispersion comprising a water soluble or a water dispersible conductive polymer on and in contact with the optical film; drying to form the antistatic layer; and applying a pressure sensitive adhesive layer on another side of the antistatic layer. The remaining claims depend from, or recite all elements of, Claim 9.

Mukunoki

Mukunoki teaches a process for preparation of a cellulose acylate film from a cellulose acylate solution. Mukunoki teaches that when the cellulose acylate film is used as a protective film of a polarizing plate, the film preferably has at least one antistatic layer containing electrically conductive material or a hydrophilic binder layer for adhesion onto the polarizer.

Mukunoki does not teach or suggest a method of manufacturing the antistatic optical film comprising the steps of applying an aqueous solution or an aqueous dispersion comprising the water soluble or water dispersible conductive polymer on the optical film.

Mukunoki does not teach or suggest an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Mukunoki does not teach or suggest a pressure-sensitive adhesive layer.

Muys

Muys teaches coating poly(3,4-ethylenedioxy-thiophene) dispersion in a aqueous solution on a polyethylene terephthalate film support. Muys teaches that this antistatic layer is used in black-and-white or colour photographic materials (column 3, lines 26-33 and column 8, lines 43-49).

Muys does not teach or suggest an optical film used in a liquid crystal panel. Muys does not teach or suggest an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Muys does not teach or suggest a pressure-sensitive adhesive layer.

Mikura

Mikura teaches a pressure-sensitive adhesive layer such as an acrylic pressure-sensitive adhesive layer on an optical base film for attaching to a liquid crystal cell.

Appl. No. : 10/824,797
Filed : April 15, 2004

Mikura does not teach or suggest an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Mikura does not teach or suggest an antistatic layer.

Claim 9 is not Obvious over the Cited References

Applicants submit that the method of Claim 9, as amended, is not obvious over Mukunoki, Muys and Mikura because Muys is non-analogous to the presently claimed methods, and therefore cannot be relied on to reject the presently claimed invention, and no combination of Mukunoki and Mikura teaches or suggests all elements of the claims. Furthermore, no combination of Mukunoki, Muys and Mikura teaches or suggests the method of Claim 9, as amended, because no combination of these references teaches or suggests all elements of Applicants' claims, combined in the same manner as claimed.

Muys Cannot be Relied On in the Rejection

The Muys reference is non-analogous to the presently claimed methods, and therefore cannot be relied on to reject the presently claimed invention. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Muys does not meet either of these criteria.

The teachings of Muys are directed to antistatic layers for photographic film. Muys teaches that antistatic layers are used in photographic film "[i]n order to avoid diffusion of ionic compounds out of [gelatin-silver halide] emulsion layers during wet processing treatments" (column 1, lines 43-56). Muys teaches providing a sheet containing a hydrophobic polyester resin support and an antistatic layer that possesses good adherence to the support and can be subjected to stretching together with the support without losing its adherence thereto and without substantial coloration in heat-treatment during and following stretching (column 3, lines 17-25). Muys is not directed to use of antistatic layers reducing the static electricity generated in case of peeling of the surface protective film from liquid crystal panels, as are Applicants. Thus, Muys teaches use of an antistatic layer in a different structure for a different purpose (prevention of ion diffusion in photographic film) than the presently claimed methods, which are directed to protecting liquid

Appl. No. : 10/824,797
Filed : April 15, 2004

crystal displays. Accordingly, the teachings of Muys are directed to a different field of endeavor than the presently claimed methods.

Furthermore, Muys' teachings are directed to developing an antistatic layer that possesses favorable characteristics such as good adherence to the support and ability to be subjected to stretching. In contrast, Applicants' claimed method addresses the problem of adverse influence on optical characteristics caused by organic solvents used in forming antistatic layers. Thus, Muys' teachings are not reasonably pertinent to the particular problem with which Applicants were concerned.

Since Muys is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which the Applicants were concerned, Muys cannot be relied on as a basis for rejection of the claims.

In view of the above, the method of Claim 9 is not *prima facie* obvious because the two remaining references, Mukunoki and Mikura, do not teach or suggest all elements of the claims. Applicants submit that Mukunoki does not teach or suggest a method of manufacturing the antistatic optical film comprising the steps of applying an aqueous solution or an aqueous dispersion comprising the water soluble or water dispersible conductive polymer on the optical film. Applicants' position is consistent with the PTO's position in this regard, as evidenced in the Office Action at the paragraph spanning pages 3-4. Mikura does not teach or suggest an antistatic layer. Accordingly, Mikura does not teach or suggest that which is missing in Mukunoki. As such, no combination of Mukunoki and Mikura, teaches or suggests all elements of Claim 9 or any claim dependent therefrom.

The References do not Teach or Suggest the Elements Combined in the Same Manner as Claimed

A collection of references relied upon that teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references in the same manner as claimed by Applicants. *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because "there was no finding as to the specific understanding or principle within the knowledge of a skilled

Appl. No. : 10/824,797
Filed : April 15, 2004

artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed.”).

None of the references, alone or combined, teach or suggest teach or suggest a method for manufacturing an antistatic optical film comprising an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. While the different references teach some components of that which is claimed, no combination of these references would lead specifically to that which is claimed.

For example, while Mukunoki teaches that a cellulose acylate film can have an antistatic layer, the reference does not teach or suggest a method for manufacturing an antistatic optical film comprising an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Mukunoki also is completely silent regarding any pressure-sensitive adhesive layer. Furthermore, Mukunoki does not teach or suggest applying an aqueous solution or an aqueous dispersion comprising the water soluble or water dispersible conductive polymer on the optical film.

Muys does not teach or suggest critical elements missing in Mukunoki. Muys, while teaching a coating poly(3,4-ethylenedioxy-thiophene) dispersion in a aqueous solution on a photographic film support, does not teach or suggest a method for manufacturing an antistatic optical film comprising an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Muys is completely silent regarding pressure-sensitive adhesive layer. As such, no combination of Muys or Mukunoki teaches or suggests suggest a method for manufacturing an antistatic optical film comprising an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer, or for that matter, any method employing a pressure-sensitive adhesive layer.

Mikura does not teach or suggest that which is missing in Mukunoki and Muys. While Mikura teaches a pressure-sensitive adhesive layer such as an acrylic pressure-sensitive adhesive layer on an optical base film for attaching to a liquid crystal cell, Mikura does not teach or suggest a method for manufacturing an antistatic optical film comprising an antistatic layer on at least one side of an optical film and a pressure sensitive adhesive layer on another side of the antistatic layer. Further, Mikura is completely silent regarding any antistatic layer.

Appl. No. : **10/824,797**
Filed : **April 15, 2004**

None of the references, or any combination thereof, provide an objective reason to combine the teachings of the references in the same manner as claimed by Applicants. In asserting that the combination of references renders obvious the claimed methods, the Office Action states:

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used [] the adhesive layer laminated on another side of a surface having the optical film of the antistatic layer of Mukunoki, in order to improve the efficiency of the display assembly and to prevent any dispersion in display quality, as taught by Mikura. *Office Action* at page 5.

This statement asserts that it would have been obvious for an optical film to contain both an antistatic layer and a pressure-sensitive adhesive layer. However, this statement does not describe the “specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of [Applicants’] invention to make the combination in the manner claimed” as is required to establish the claims as *prima facie* obvious.

Applicants have found that the claimed methods can provide an antistatic optical film having the recited configuration of the optical film, antistatic layer and pressure-sensitive adhesive layer, and possessing excellent antistatic effect, optical characteristics and appearance. No teaching or suggestion in any of the cited references would lead to a method of forming the specifically recited configuration of the antistatic optical film, and its superior antistatic, optical, and appearance characteristics. No such teaching is found in the cited references. As such, the cited references do not render the method of Claim 9 obvious.

Appl. No. : 10/824,797
Filed : April 15, 2004

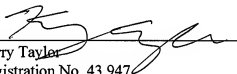
CONCLUSION

In light of the Applicants' amendments to the claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 19-Jan-07 By: 
Kerry Taylor
Registration No. 43,947
Attorney of Record
Customer No. 20,995
(619) 235-8550

3312336
011607